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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously amended): A rotor for a permanent magnet motor, comprising:
a rotor yoke; and
a permanent magnet ring mounted on the rotor yoke, the permanent magnet ring including a plurality of circumferentially spaced poles, and wherein a radially-inner peripheral edge of the permanent magnet ring has a constant diameter;
one of the rotor yoke and the permanent magnet ring being an annular member including depressed portions along a radially-outer peripheral edge; and
the depressed portions shaped so the motor produces a sinusoidal flux density during operation.
2. (Previously amended): The rotor of claim 1 wherein the other of the rotor yoke and the permanent magnet ring is ring-shaped.
3. (Original): The rotor of claim 1 wherein the rotor yoke is skewed.
4. (Original): The rotor of claim 3 wherein the rotor yoke includes the depressed portions.
5. (Original): The rotor of claim 3 wherein the magnet ring includes the depressed portions.
6. (Original): The rotor of claim 1 wherein each of the plurality of poles is tapered along each depressed portion.

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7. (Original): The rotor of claim 6 wherein the magnet ring includes the depressed portions.
8. (Original): The rotor of claim 1 wherein the rotor yoke comprises a stack of laminations.
9. (Original): The rotor of claim 1 wherein the permanent magnet ring is a pressed permanent magnet ring.
10. (Currently amended): The rotor of claim 1 wherein each of the depressed portions ~~form one of~~ roughly forms one of a trapezoidal depression and an ovoid depressions depression.
11. (Original): The rotor of claim 1 wherein the magnet ring includes six poles.
12. (Original): The rotor of claim 1 wherein each of the depressed portions forms an apex of a triangle.
13. (Original): The rotor of claim 1 wherein the magnet ring comprises one of a rare-earth magnetic material and a ceramic magnetic material.
14. (Original): The rotor of claim 1 wherein each of the depressed portions is uniform in shape.
15. (Currently amended): A rotor for a permanent magnet motor, comprising:
a rotor yoke; and
a permanent magnet ring adhered to the rotor yoke, the permanent magnet ring including a plurality of circumferentially spaced poles and the permanent magnet ring having a radial edge opposed to the rotor yoke, the radial edge having a first constant radius;

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one of the rotor yoke and the permanent magnet ring including a plurality of depressions along a peripheral edge adjacent the other of the permanent magnet ring and the rotor yoke; and

the plurality of depressions shaped so the motor produces a sinusoidal flux density during operation.

16. (Re-presented): ~~The rotor of claim 15~~ A rotor for a permanent magnet motor, comprising:

a rotor yoke; and

a permanent magnet ring adhered to the rotor yoke, the permanent magnet ring including a plurality of circumferentially spaced poles and the permanent magnet ring having a radial edge opposed to the rotor yoke, the radial edge having a first constant radius;

one of the rotor yoke and the permanent magnet ring including a plurality of depressions along a peripheral edge adjacent the other of the permanent magnet ring and the rotor yoke; and

the plurality of depressions shaped so the motor produces a sinusoidal flux density during operation; and wherein the peripheral edge has a second constant radius between the plurality of depressions.

17. (Re-presented): ~~The rotor of claim 15~~ A rotor for a permanent magnet motor, comprising:

a rotor yoke; and

a permanent magnet ring adhered to the rotor yoke, the permanent magnet ring including a plurality of circumferentially spaced poles and the permanent magnet ring having a radial edge opposed to the rotor yoke, the radial edge having a first constant radius;

one of the rotor yoke and the permanent magnet ring including a plurality of depressions along a peripheral edge adjacent the other of the permanent magnet ring and the rotor yoke; and

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the plurality of depressions shaped so the motor produces a sinusoidal flux density during operation; and wherein the other of the rotor yoke and the permanent magnet ring has a radial edge having a third constant radius and adjacent the peripheral edge.

18. (Original): The rotor of claim 15 wherein the rotor yoke is skewed.
19. (Original): The rotor of claim 15 wherein each of the plurality of poles is tapered along each of the plurality of depressions.
20. (Original): The rotor of claim 15 wherein each of the plurality of depressions is uniform in shape.
21. (Previously added): The rotor of claim 1 wherein each depressed portion is located at a junction of two poles.
22. (Re-presented): The rotor of claim 1 A rotor for a permanent magnet motor, comprising:
a rotor yoke wherein the rotor yoke is non-magnetized; and
a permanent magnet ring mounted on the rotor yoke, the permanent magnet ring including a plurality of circumferentially spaced poles, and wherein a radially-inner peripheral edge of the permanent magnet ring has a constant diameter;
one of the rotor yoke and the permanent magnet ring being an annular member including depressed portions along a radially-outer peripheral edge; and
the depressed portions shaped so the motor produces a sinusoidal flux density during operation.
23. (Previously added): The rotor of claim 1 wherein the rotor yoke is mountable on a shaft of the permanent magnet motor.

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24. (Currently amended): The rotor of claim 22 23 wherein the rotor yoke is non-magnetized.

25. (Previously added): The rotor of claim 15 wherein the rotor yoke is mountable on a shaft of the permanent magnet motor.

26. (Re-presented): ~~The rotor of claim 15~~ A rotor for a permanent magnet motor, comprising:

a rotor yoke wherein the rotor yoke is non-magnetized; and

a permanent magnet ring adhered to the rotor yoke, the permanent magnet ring including a plurality of circumferentially spaced poles and the permanent magnet ring having a radial edge opposed to the rotor yoke, the radial edge having a first constant radius;

one of the rotor yoke and the permanent magnet ring being an annular member including depressed portions along a radially-outer peripheral edge; and

the plurality of depressions shaped so the motor produces a sinusoidal flux density during operation.

27. (Previously added): The rotor of claim 15 wherein each of the plurality of depressions is located at a junction of two poles.

28. (Previously added): The rotor of claim 15 wherein each of the plurality of depressions roughly forms one of a trapezoidal depression and an ovoid depression and an apex of a triangle.